CLAIMS

1. A method for manufacturing coagulated particles from a latex prepared by emulsion polymerization, comprising: step (A) of adjusting the temperature of a latex prepared by emulsion polymerization within the range of Tm ± 15°C wherein Tm represents the softening temperature of the polymer in the latex, the amount of the latex being 100 parts by weight on a polymer solid basis; step (B) of adding 0.03 to 3.0 parts by weight of polyethylene oxide with stirring; step (C) of adding 0 to 1.5 parts by weight of a coagulant to cause phase separation of a polymer component from an aqueous phase; step (D) of further adding 0.2 to 10 parts by weight of a coagulant to form an aqueous suspension containing coagulated polymer particles having a volume-average particle size of 50 to 500 μm; and step (E) of adjusting the temperature of the suspension to Tm or more.

2. The method according to Claim 1, further comprising a step of: adding 0.01 to 3.0 parts by weight of a nonionic surfactant other than polyethylene oxide based on 100 parts by weight of the polymer solid content at latest before the step (D) of adding the coagulant.

3. The method according to Claim 1 or 2, wherein the polymer in the latex prepared by emulsion polymerization has a volume-average particle size of 0.05 to 0.5 μm.

4. The method according to any one of Claims 1 to 3,

wherein the latex prepared by emulsion polymerization has a polymer solid content of 10 to 35 percent by weight.

5. The method according to any one of Claims 1 to 4, wherein the temperature of the latex prepared by emulsion polymerization is adjusted within the range of Tm ± 10°C wherein Tm represents the softening temperature of the polymer.

6. The method according to any one of Claims 1 to 5, wherein a 0.01 to 10 percent by weight aqueous solution of polyethylene oxide that has a viscosity-average molecular weight of 600,000 to 8,000,000 is added in an amount of 0.05 to 2.0 parts by weight based on 100 parts by weight of the polymer on a solid basis.

7. The method according to any one of Claims 2 to 6, wherein a 0.01 to 10 percent by weight aqueous solution of a nonionic surfactant other than polyethylene oxide is added in an amount of 0.05 to 2.0 parts by weight based on 100 parts by weight of the polymer on a solid basis.

8. The method according to any one of Claims 1 to 7, wherein the coagulant is an aqueous solution of a monovalent or divalent inorganic salt and/or an inorganic acid.

9. The method according to any one of Claims 1 to 8, wherein the polymer latex is prepared by polymerizing 50 to 100 percent by weight of an acrylic acid ester, 0 to 40 percent by weight of

an aromatic vinyl monomer, 0 to 10 percent by weight of a vinyl monomer copolymerizable with the acrylic acid ester and the aromatic vinyl monomer, and 0 to 5 percent by weight of a multi-functional monomer to form a rubber latex having a glass transition temperature of 0°C or less, and then graft-polymerizing 50 to 95 parts by weight, on a solid basis, of the rubber latex with 5 to 50 parts by weight of a monomer mixture containing 10 to 100 percent by weight of a methacrylic acid ester, 0 to 90 percent by weight of an aromatic vinyl monomer, 0 to 25 percent by weight of a vinyl cyanide monomer, and 0 to 20 percent by weight of a vinyl monomer copolymerizable with the methacrylic acid ester, the aromatic vinyl monomer, and the vinyl cyanide monomer.

10. The method according to any one of Claims 1 to 8, wherein the polymer latex is prepared by emulsion-polymerizing 60 to 95 parts by weight of a mixture containing 50 to 95 percent by weight of methyl methacrylate, 5 to 50 percent by weight of a methacrylic acid ester having a C_{2-8} alkyl group, and 0 to 20 percent by weight of a vinyl monomer copolymerizable with the methyl methacrylate and the methacrylic acid ester; and then polymerizing, in the presence of the resulting polymer latex, 5 to 40 parts by weight of a mixture containing 20 to 80 percent by weight of methyl methacrylate, 20 to 80 percent by weight of at least one monomer selected from acrylic acid esters and methacrylic acid esters other than methyl methacrylate, and 0 to 20 percent by weight of a vinyl monomer copolymerizable with the forgoing monomers, the total amount being 100 parts by weight.

11. The method according to any one of Claims 1 to 8, wherein the polymer latex is prepared by polymerizing 50 to 100 percent by weight of butadiene, 0 to 40 percent by weight of an aromatic vinyl monomer, 0 to 10 percent by weight of a vinyl monomer copolymerizable with butadiene and the aromatic vinyl monomer, and 0 to 5 percent by weight of a multi-functional monomer to form a rubber latex having a glass transition temperature of 0°C or less; and then graft-polymerizing 50 to 95 parts by weight, on a solid basis, of the rubber latex with 5 to 50 parts by weight of a monomer mixture containing 10 to 100 percent by weight of a methacrylic acid ester, 0 to 90 percent by weight of an aromatic vinyl monomer, 0 to 25 percent by weight of a vinyl cyanide monomer, and 0 to 20 percent by weight of a vinyl monomer copolymerizable with the methacrylic acid ester, the aromatic vinyl monomer, and the vinyl cyanide monomer.